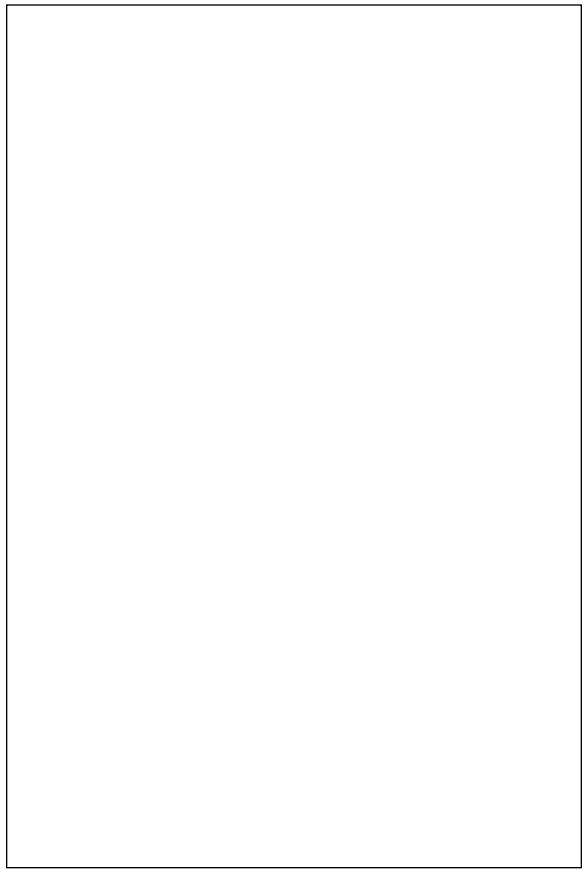
Keynote Address



Gen. John T. Chain, Jr.

Turning Points

Gen. John T. Chain, Jr., USAF (Ret.)

I was asked to give you my ideas about the major turning points in the fifty-year history of the United States Air Force. Since I am neither a historian nor have I been associated with the Air Force throughout the period, I decided I could not present a full picture from my viewpoint alone. So I contacted eleven retired general officers from different disciplines who served at different times, and asked them for their opinions. All responded quickly and insightfully, which was no surprise. What did surprise me was that, rather than identifying the same two or three major turning points and perhaps a couple from their personal experiences, most suggested more than four or five, with few duplications. No individual person was singled out, with one exception—Gen. Curtis E. LeMay.

First I would like to share with you some thoughts about my own career, then take up the factors cited by the twelve retired four-star generals, including me. Finally, I would like to make a few comments about what I believe was *the* major turning point in our history—the advent of nuclear weapons and the resulting national strategy.

Personal View

In reflecting on my own experience, I thought about what had caused me to make the Air Force a career in the first place, and why I remained. It was the men I worked for, more than any specific events, who were most influential—bosses who expressed confidence in me and communicated the sense that they cared about me as an individual.

Mr. McCarthy, my first civilian flight instructor, not only convinced me that I could fly, but that I could fly well. Capt. Tom Arnold, the 417th Tactical Fighter Squadron operations officer in my first squadron at Toul Rosiere, France, was tough but showed interest in me as an individual. Lt. Col. Chuck Horton, who was both my and Bob Oaks' squadron commander in Clovis, New Mexico, was a demanding but caring leader. As Gen. Al Schinz' aide when he was head of the Advisory Group in Vietnam, I saw how hard general officers worked and the amount of paperwork they had to process. When I

was assigned to the Pentagon as a new major, I was surprised at the responsibility given to action officers, but I came to appreciate the long and diligent hours they put in. Many of those men cared deeply about the mission and the people—Col. George Tormone, Col. Robby Robinson, Gen. John Bray, Gen. Dick Ellis, and Gen. Lou Clay.

Some years afterward I was special assistant to Gen. Bob Dixon. He was an extremely bright person, yet I doubt anybody else could have succeeded using his management style. He taught me a great deal about the qualities to be expected of Air Force leaders, and he remains a good friend to this day. Later I worked for Air Force Secretary John Stetson, Gens. Charles Gabriel and Jerry O'Malley, and Secretary of State George Shultz. From all of them, I learned invaluable lessons.

There were a few misfits along the way, but not many. If they had appeared early in my career, I might have left quickly and gone back to law school. Although I spent two years in combat and had several command positions, those experiences made less of an impact than the strong and concerned leaders I worked for.

Air Force Turning Points

Let me now enumerate the turning points in Air Force history that were singled out by the twelve retired generals. Since the Air Force mission is to organize, train, equip, and fight, I put the responses into those four categories and then listed them in chronological order. It is fortunate that, instead of many catastrophic turning points, a number of events nudged the Air Force toward course corrections rather than dramatic changes in direction.

Organize

Obviously, the first major event of the last fifty years was the creation in 1947 of a separate Air Force. The new Air Force started off with a huge infrastructure, a hodgepodge of leftover war planes, and, I am told, an unprofessional force. However, the late 1940s saw the formation of the Strategic Air Command and an ensuing national strategy of massive retaliation that resulted in SAC's dominance through the 1950s and into the 1960s. In turn, tac air became a "little SAC," with F–100s, F–105s, and F–111s pulling nuclear alert. Since most of the training focused on the nuclear mission, tactical skills were lost. In Vietnam we would pay a price for that loss.

In 1956 a B–52 dropped a hydrogen bomb; subsequently the Air Force was given custody of nuclear weapons. In 1960 a decision paper that addressed the utility of military air transport in peace and war led to a special relationship between the Air Force and the airline industry. This latter development would prove invaluable to the Air Force in times of mobilization and deployment.

Social change was occurring as well. In 1970 the restriction that prohibited women from comprising more than two percent of the Air Force was removed. Legislation followed that required up to twenty percent of the force to be women. In the 1970s and 1980s the Total Force—that included active duty, guard, and reserve units—became a reality. The Air Force accomplished that integration much better than the other services. In the 1980s the Air Force began to adapt what is called modern management techniques, with a focus on quality matrix organizations and downsizing through restructuring.

In 1992 a momentous change came with the abolishment of SAC, TAC, and MAC, to be replaced by STRATCOM, ACC, and AMC. It will be several more years before we can fully assess the gains and losses of that reorganization. Also in 1992, Systems Command and Logistics Command merged. Today many generals are concerned that, while it may have saved dollars, the merger has created a less effective organization than one realized from two separate commands.

Train

Training is the second of our missions. Again, let me move through the major events and developments chronologically. Several generals and I identified the professionalism exemplified by Gen. Curtis LeMay as a significant influence on the direction taken by the Air Force. I was not then in the service but have been told that SAC, like the rest of the Air Force, lacked organization and discipline in the late 1940s and early 1950s. General LeMay upgraded the standards to create in SAC a superbly trained fighting force. LeMay's disciples spread throughout the Air Force, where they perpetuated those high standards of professionalism.

Gen. Cam Sweeny, for example, who came to TAC in the early 1960s, revolutionized our way of doing business. From squadron-level to centralized maintenance, or "communist maintenance" as it was called informally, a stringent stan-eval system was instituted. Predeployment briefings were mandated. I remember going with my squadron commander to TAC headquarters to brief the TAC vice commander on an upcoming deployment to Europe. To say that our casual approach was a disaster would be a gross understatement. The positive changes brought by General Sweeny were felt all the way to the line pilots. That same professionalism successfully reduced the Air Force accident rates that had been astronomically high in the 1940s and 1950s, and would have put the Air Force out of business had they continued.

In the 1960s Vietnam showed that tactics, techniques, and procedures in the fighter world needed a great deal of overhauling. Not until later in that war were the "aggressors" formed and dissimilar air combat maneuvering permitted. Air superiority came to be viewed in a holistic way; the recognition that surface-to-air missiles (SAMs) can limit flying operations meant

that their suppression had to become part of achieving air superiority. Those expanded concepts were integrated into the training programs and led to capabilities such as Compass Call, Wild Weasel, and eventually the F–117.

The 1970s saw realistic training come into being, as exemplified by Red Flag and the other Flag series of exercises. A renewed emphasis on readiness during the 1970s and 1980s—spare parts and in-commission rates—allowed the force to train efficiently and maximize its combat capability. In the 1980s SAC shifted toward training for a conventional role, which prepared it for bare-base conventional operations that, during the Gulf War, took place in remote locations like Diego Garcia.

Equip

On the subject of the Air Force mission to equip the forces, as you might surmise, everyone I contacted suggested advances in technology. All mentioned the transition from propellers to jets in the late 1940s and early 1950s. Phil Condent, the current president of Boeing and not a general officer, identified the swept wing as a major technical change in aircraft design that led to airplanes like the B–47, B–52, F–84, F–86, and the Century-series fighters. Airborne radar permitted all-weather navigation and bomb delivery capability. The evolution of the tanker, even though it had been tested back in the 1920s with the *Question Mark*, came into its own with the KB–50, KC–97, KC–135, and KC–10. I know that General LeMay would have put tankers high on his list of significant factors because he told me on many occasions about the importance of the tanker fleet in the projection of air power. Reconnaissance aircraft, U–2s and SR–71s, developed in the 1950s and still going strong, gave reconnaissance much greater utility.

Infrared and laser-guided bombs have changed the lethality of aircraft. Gen. Tom Marsh noted the importance of solar cells in making long-duration satellites practical. The micro chip, which he also cited, played a major part in ballistic missile navigation, in the reliability of avionics, and, of course, in the enormous advances in computer technology. The miniaturization of nuclear weapons permitted increased security, safety, and accuracy, as did integrated avionics and software. Fly-by-wire allowed basically unstable airframes like those in the F–15, the F–16, and the B–2 to become a reality. Computer miniaturization led to the development of internal navigation, weapons control, bombing and missile guidance systems, autopilots, fuel management, and flight controls, to name but a few. Stealth technology, exemplified by F–117s, B–2s, and stealthy cruise missiles, with their resulting impact on enemy capabilities, has been a momentous development. Gen. Russ Dougherty maintains that the Global Positioning System will come to be seen as an advance as significant as electricity, radio, and penicillin.

Fight

The services organize, train, and equip, while the commanders in chief conduct wars. Warfighting has taken various guises since the creation of the independent Air Force fifty years ago. The Berlin Airlift was an early demonstration of what airlift could do. Our successes thereafter in the Cold War would have been less without it. The era had its hot spots too. The Korean conflict in 1950 illustrated the results of poor preparation for war. For instance, it took nine months to get F–86s into the war to replace the F–51s that were fighting the MiGs.

After the Cuban missile crisis, the realization occurred that conventional capabilities were needed to give the national command authority a choice between nuclear confrontation and surrender. Since no Air Force–designed fighter aircraft were then in production, the Air Force was forced to buy Navy-designed F–4s and A–7s, neither of which was designed as an air superiority fighter, and they later proved poor against MiGs. Vietnam also confirmed that the Air Force still was not well trained for conventional operations. There had been little to no air-to-air training in the late 1950s and 1960s, and F–100s, F–104s, F–105s, F–111s, F–4s, and A–7s were not optimal in the environment of Southeast Asia. SAMs and radar-controlled guns took their toll on ground attack missions. Fortunately, the Air Force Systems Command and the manufacturers responded well by producing jamming pods and anti-SAM missiles.

The 1989 fall of the Berlin Wall signaled the end of the Cold War. Major reductions followed in the U.S. defense budget and in force levels. Yet shortly afterwards, in 1991, Desert Storm became the Air Force's final exam for all the changes in structure, tactics, techniques, procedures, and training that had been put into place, and for the equipment that had been developed and fielded. It proved that precision and standoff weapons worked and that stealth was effective. It validated Air Force principles. It demonstrated the importance of information warfare, and that an air component commander was best suited to conduct an air war.

Nuclear Weapons

Finally, let me mention what may be considered the "shaping point" in the history of air power. It came simultaneously with the creation of the independent Air Force and remains relevant today. The advent of nuclear weapons determined our nation's political and military strategies. Without nuclear weapons and the deterrent strategy that they permitted, one can only speculate about whether the Cold War might have exploded into World War III. I believe it can be argued that nuclear deterrence has served our country, and the whole world, very well.

With the Cold War now over, one of our own, Gen. Lee Butler, has proposed as a goal the elimination of all nuclear weapons. He believes that the

risk posed by nuclear weapons far outweighs their presumed benefit and that every President of the United States since Eisenhower has endorsed their elimination. I am extremely disturbed by General Butler's contentions, so I asked Gen. Brent Scowcroft, the national security advisor for Presidents Bush and Ford, if they and senior members of their administrations favored eliminating nuclear weapons. Scowcroft informed me that neither Presidents Ford and Bush nor in fact President Nixon had held that view, and he sincerely doubted it had been President Eisenhower's position.

I believe that, like gunpowder, we cannot disinvent nuclear technology. Many countries have nuclear weapons today: the United States, the United Kingdom, France, Russia, India, and China. Israel and South Africa appear to have them, and others—Pakistan, Japan, North Korea, Brazil, Argentina, and Australia, to name a few—have the technology to build them. Iraq, Syria, Libya, and terrorist groups very much want a nuclear capacity. Now that the Cold War is over, according to some people, the world is safe for democracy. Yet I concur with Winston Churchill who once said that anyone who studied history recognizes we are "between wars."

During the Cold War, nuclear weapons provided deterrence. They will continue to provide deterrence to countries that have them and, equally important, to countries that might develop them, in spite of test ban treaties. Nuclear weapons also deter countries that have or might develop chemical and biological weapons, despite the chemical weapons treaty. Effectively, the elimination of nuclear weapons would make the world safe for conventional war.

It seems to me that many of those who support the elimination of all nuclear weapons in the U.S. arsenal, particularly those in the military or retired military, have a self-serving belief that to do so would justify larger standing conventional forces: armies, navies, and air forces. I contend that lower numbers of weapons can be agreed to through negotiation but that their elimination should not be the ultimate goal. As former Secretary of Defense James Schlesinger stated, "It is an unachievable goal and it is a perilous goal."

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Many events and technological developments have shaped our Air Force, but fortunately none has led to nuclear conflict. We can be hopeful, even if it is most unlikely, that all future turning points will fit under the categories of organize, train, and equip . . . but not fight.